INTRODUCTION

In Spain, three trichinellosis surveys were carried out in the wild fauna of Cataluña, La Rioja and Castilla-La Mancha regions in the context of a surveillance program on wildlife diseases. Trichinella spiralis and T. britovi live in apparent sympatry in this fauna of the Iberian Peninsula. La Rioja is a natural geographic area in the NE of Spain. This region is formed by a succession of mountains, valleys and rivers. During trichinellosis survey (2001-2003), the Veterinary Services of the Govern of La Rioja Autonomous Region processed meat samples of 1278 wild boars and 70 foxes by trichinoscopy and/or standard digestion. Trichinellosis prevalence in wild boars in this study was 0.70%. Only 3 foxes among the 70 examined (4.2%) were parasitized. In Castilla-La Mancha, a broad open region in Central Spain at 600 meters above sea level, a total of 2216 wild boars were examined by trichinoscopy in the local abattoir (Toledo) during the trichinellosis survey (2007-08 campaign). Here the prevalence of trichinellosis was next to 0.72%.

In Cataluña, an autonomous region placed in the NE of Spain, a total of 1069 wild boars and 156 foxes were captured during the hunting season and the prevalence of trichinellosis, as determined by standard digestion, was 0.93% and 0.64%, respectively during the trichinellosis survey (2006-08 campaign).

MATERIALS AND METHODS

Trichinelllosis surveys were performed by Veterinary Services of Spain, of the Balearic Islands and the Canary Islands. The survey was carried out at the Wildlife Services of La Rioja, Castilla-La Mancha and Cataluña regions of Spain. The meat samples were collected through a public program carried out by the Wildlife Services. The samples were collected from different localities and species, in the periods of 2001-2003, 2006 and 2008.

RESULTS

The results of the surveys are presented in the Table 1. The prevalence of T. spiralis in wild boars was 0.52% in La Rioja, 0.09% in Castilla-La Mancha and 0.37% in Cataluña. The prevalence of T. britovi in wild boars was 0.02% in La Rioja, 0.01% in Castilla-La Mancha and 0.01% in Cataluña.

DISCUSSION AND CONCLUSIONS

The uniformity found within T. spiralis isolates suggest its perhaps recent introduction whereas the T. britovi isolates suggest that this species represents one of the original endemic Trichinella in this West-End of Eurasia. Orographical diversity of these regions would preserve its population variation. The high prevalences of T. spiralis is a good example of the persistence in sylvatic conditions of a species from the domestic cycle. Our observations confirm the sympatric coexistence of the two species and the risk to human health represented by the consumption of non-inspected wild boar meat. In addition, we confirmed that ISSR-PCR is a robust technique for the molecular identification of Trichinella species and genotypes.